

**SYSTEM AND METHOD FOR
GENERATING A DIRECTIONAL INDICATOR
ON A WIRELESS COMMUNICATIONS DEVICE DISPLAY**

ABSTRACT OF THE INVENTION

A system and a method are provided for generating a directional indicator on a mobile wireless communications device display. The system comprises a magnetic detection circuit, a direction circuit and a user interface screen. The magnetic detection circuit determines the orientation of the wireless device in a magnetic field and supplies a magnetic bearing signal responsive to the determined orientation. The direction circuit accepts the magnetic bearing signal and data defining a relationship between the magnetic bearing and a reference axis. The direction circuit determines the direction of the reference axis based on the defined relationship and includes the direction of the reference axis in a reference axis signal. For example, the reference axis can be aligned with an axis on the user interface screen. As the screen and the screen axis rotate, the reference axis rotates to maintain the alignment. The screen axis could be aligned with the long axis of the wireless device housing and point to the end of the screen opposite the keypad (what typically might be considered the top of the wireless device). In this manner, the orientation of the screen axis corresponds to the direction in which the long axis of the wireless device housing is pointing. The direction circuit communicates the reference axis signal containing the reference axis direction to the user interface screen. In response to receiving the reference axis signal, the screen displays the direction of the reference axis.